

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/776,910

DATE: 12/17/2001

TIME: 14:44:30

Input Set : N:\Crf3\RULE60\09776910.txt

Output Set: N:\CRF3\12172001\I776910.raw

61 <210> SEQ ID NO: 2
 62 <211> LENGTH: 570
 63 <212> TYPE: PRI
 64 <213> ORGANISM: Lucilia cuprina
 66 <400> SEQUENCE: 2

67 Met Asn Phe Asn Val Ser Leu Met Glu Lys Leu Lys Trp Lys Ile Lys	
68 1 5 10 15	
70 Cys Ile Glu Asn Lys Phe Leu Asn Tyr Arg Leu Thr Thr Asn Glu Thr	
71 20 25 30	
73 Val Val Ala Glu Thr Glu Tyr Gly Lys Val Lys Gly Val Lys Arg Leu	
74 35 40 45	
76 Thr Val Tyr Asp Asp Ser Tyr Tyr Ser Phe Glu Gly Ile Pro Tyr Ala	
77 50 55 60	
79 Gln Pro Pro Val Gly Glu Leu Arg Phe Lys Ala Pro Gln Arg Pro Thr	
80 65 70 75 80	
82 Pro Trp Asp Gly Val Arg Asp Cys Cys Asn His Lys Asp Lys Ser Val	
83 85 90 95	
85 Gln Val Asp Phe Ile Thr Gly Lys Val Cys Gly Ser Glu Asp Cys Leu	
86 100 105 110	
88 Tyr Leu Ser Val Tyr Thr Asn Asn Leu Asn Pro Glu Thr Lys Arg Pro	
89 115 120 125	
91 Val Leu Val Tyr Ile His Gly Gly Phe Ile Ile Gly Glu Asn His	
92 130 135 140	
94 Arg Asp Met Tyr Gly Pro Asp Tyr Phe Ile Lys Lys Asp Val Val Leu	
95 145 150 155 160	
97 Ile Asn Ile Gln Tyr Arg Leu Gly Ala Leu Gly Phe Leu Ser Leu Asn	
98 165 170 175	
100 Ser Glu Asp Leu Asn Val Pro Gly Asn Ala Gly Leu Lys Asp Gln Val	
101 180 185 190	
103 Met Ala Leu Arg Trp Ile Lys Asn Asn Cys Ala Asn Phe Gly Gly Asn	
104 195 200 205	
106 Pro Asp Asn Ile Thr Val Phe Gly Glu Ser Ala Gly Ala Ala Ser Thr	
107 210 215 220	
109 His Tyr Met Met Leu Thr Glu Gln Thr Arg Gly Leu Phe His Arg Gly	
110 225 230 235 240	
112 Ile Leu Met Ser Gly Asn Ala Ile Cys Pro Leu Ala Asn Thr Gln Cys	
113 245 250 255	
115 Gln His Arg Ala Phe Thr Leu Ala Lys Leu Ala Gly Tyr Lys Gly Glu	
116 260 265 270	
118 Asp Asn Asp Lys Asp Val Leu Glu Phe Leu Met Lys Ala Lys Pro Gln	
119 275 280 285	
121 Asp Leu Ile Lys Leu Glu Glu Lys Val Leu Thr Leu Glu Glu Arg Thr	
122 290 295 300	
124 Asn Lys Val Met Phe Pro Phe Gly Pro Thr Val Glu Pro Tyr Gln Thr	
125 305 310 315 320	
127 Ala Asp Cys Val Leu Pro Lys His Pro Arg Glu Met Val Lys Thr Ala	
128 325 330 335	
130 Trp Gly Asn Ser Ile Pro Thr Met Met Gly Asn Thr Ser Tyr Glu Gly	
131 340 345 350	

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133 Leu Phe Phe Thr Ser Ile Leu Lys Gln Met Pro Met Leu Val Lys Glu
134           355          360          365
136 Leu Glu Thr Cys Val Asn Phe Val Pro Ser Glu Leu Ala Asp Ala Glu
137           370          375          380
139 Arg Thr Ala Pro Glu Thr Leu Glu Met Gly Ala Lys Ile Lys Lys Ala
140 385          390          395          400
142 His Val Thr Gly Glu Thr Pro Thr Ala Asp Asn Phe Met Asp Leu Cys
143           405          410          415
145 Ser His Ile Tyr Phe Trp Phe Pro Met His Arg Leu Leu Gln Leu Arg
146           420          425          430
148 Phe Asn His Thr Ser Gly Thr Pro Val Tyr Leu Tyr Arg Phe Asp Phe
149           435          440          445
151 Asp Ser Glu Asp Leu Ile Asn Pro Tyr Arg Ile Met Arg Ser Gly Arg
152           450          455          460
154 Gly Val Lys Gly Val Ser His Ala Asp Glu Leu Thr Tyr Phe Phe Trp
155 465          470          475          480
157 Asn Gln Leu Ala Lys Arg Met Pro Lys Glu Ser Arg Glu Tyr Lys Thr
158           485          490          495
160 Ile Glu Arg Met Thr Gly Ile Trp Ile Gln Phe Ala Thr Thr Gly Asn
161           500          505          510
163 Pro Tyr Ser Asn Glu Ile Glu Gly Met Glu Asn Val Ser Trp Asp Pro
164           515          520          525
166 Ile Lys Lys Ser Asp Glu Val Tyr Lys Cys Leu Asn Ile Ser Asp Glu
167           530          535          540
169 Leu Lys Met Ile Asp Val Pro Glu Met Asp Lys Ile Lys Gln Trp Glu
170 545          550          555          560
172 Ser Met Phe Glu Lys His Arg Asp Leu Phe
173           565          570
176 <210> SEQ ID NO: 3
177 <211> LENGTH: 1713
178 <212> TYPE: DNA
179 <213> ORGANISM: Lucilia cuprina
181 <400> SEQUENCE: 3
182 atgaatttca acgttagttt gatggagaaa ttaaaatgga agattaaatg cattgaaaat 60
183 aagttttaa actatcgttt aactaccaat gaaacggtgg tagctgaaac tgaatatggc 120
184 aaagtgaaag gcgttaaacg tttaactgtg tacqatgatt cctactacag ttttgagggt 180
185 ataccgtacg cccaaaccgcc agtgggtgag ctgagattta aagcacccca gcgacccaaca 240
186 ccctggatg gtgtgcgcga ttgttgcaat cataaagata agtcagtgca agttgatttt 300
187 ataacggcga aagtgtgtgg ctcagaggat tgtctatacc taagtgtcta tacgaataat 360
188 ctaaatcccc aaactaaacg tcccgttta gtatacatac atggtggtgg ttttattatc 420
189 ggtgaaaatc atcgtgatat gtatggctt gattattca taaaaaggaa tgtgtgttg 480
190 attaacatac aatatcgttt gggagctcta gggtttctaa gtttaaatc agaagacctt 540
191 aatgtgcccc gtaatgcggg ccttaaagat caagtcatgg cttgcgttg gattaaaaat 600
192 aattgcgcga acttttgtgg caatcccgat aatattacag tcttttgtga aagtgcgggt 660
193 gctgcctcta cccactacat gatgttaacc gaacaaactc gcggtcttt ccacatcggt 720
194 atactaatgt cgggtaatgc tatttgtcca ttggctataa cccaatgtca acatcgtgcc 780
195 ttcaccttag ccaaattggc cggctataag ggtgaggata atgataagga tggggaa 840
196 tttcttatga aagccaagcc acaggattta ataaaacttg aggaaaaagt tttaactcta 900
197 gaagagcgta caaataaggt catgtttcct tttggtccca ctgttgagcc atatcagacc 960

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```

198 getgattgtg tcttacccaa acatcctcgg gaaatggtaa aaactgcttg gggtaattcg 1020
199 atacccacta tgatggtaa cactcatat gaggtctat ttttcacttc aattcttaag 1080
200 caaatgccta tgcttgtaa ggaattggaa acttgtgtca attttgtcc aagtgaattg 1140
201 getgatgctg aacgcaccgc cccagagacc ttggaaatgg gtgctaaaat taaaaaggct 1200
202 catgttacag gagaaacacc aacagctgtat aattttatgg atctttgtctc tcacatctat 1260
203 ttctggttcc ccatgcatacg tttgttgeaa ttacgttca atcacaccc cggtacaccc 1320
204 gtctacttgt atcgcttcga ctgcattcg gaagatctta tcaatcccta tcgtattatg 1380
205 cgttagtggac gtgggtttaa ggggtttagt catgtgtat aattaaccta tttttctgg 1440
206 aatcaattgg ccaaacgtat gcctaaagaa tcgcgtgaat acaaaaacaat tgaacgtatg 1500
207 actggatatg ggatacataatt tgcaccact ggtaatcctt atagcaatga aattgaaggt 1560
208 atggaaaatg ttcctggaa tccaattaaag aaatccgtat aagtatacaa gtgttgaat 1620
209 attaqtgtatg aattgaaaat gattgtatg cctgaaatgg ataagattaa acaatgggag 1680
210 tccatgtttg aaaaacatag agatttattt tag 1713
212 <210> SEQ ID NO: 4
213 <211> LENGTH: 570
214 <212> TYPE: PRT
215 <213> ORGANISM: Lucilia cuprina
217 <400> SEQUENCE: 4
218 Met Asn Phe Asn Val Ser Leu Met Glu Lys Leu Lys Trp Lys Ile Lys
219      1           5           10          15
221 Cys Ile Glu Asn Lys Phe Leu Asn Tyr Arg Leu Thr Thr Asn Glu Thr
222          20          25          30
224 Val Val Ala Glu Thr Glu Tyr Gly Lys Val Lys Gly Val Lys Arg Leu
225          35          40          45
227 Thr Val Tyr Asp Asp Ser Tyr Tyr Ser Phe Glu Gly Ile Pro Tyr Ala
228          50          55          60
230 Gln Pro Pro Val Gly Glu Leu Arg Phe Lys Ala Pro Gln Arg Pro Thr
231      65          70          75          80
233 Pro Trp Asp Gly Val Arg Asp Cys Cys Asn His Lys Asp Lys Ser Val
234          85          90          95
236 Gln Val Asp Phe Ile Thr Gly Lys Val Cys Gly Ser Glu Asp Cys Leu
237          100         105         110
239 Tyr Leu Ser Val Tyr Thr Asn Asn Leu Asn Pro Glu Thr Lys Arg Pro
240          115         120         125
242 Val Leu Val Tyr Ile His Gly Gly Phe Ile Ile Gly Glu Asn His
243          130         135         140
245 Arg Asp Met Tyr Gly Pro Asp Tyr Phe Ile Lys Lys Asp Val Val Leu
246      145         150         155         160
248 Ile Asn Ile Gln Tyr Arg Leu Gly Ala Leu Gly Phe Leu Ser Leu Asn
249          165         170         175
251 Ser Glu Asp Leu Asn Val Pro Gly Asn Ala Gly Leu Lys Asp Gln Val
252          180         185         190
254 Met Ala Leu Arg Trp Ile Lys Asn Asn Cys Ala Asn Phe Gly Gly Asn
255          195         200         205
257 Pro Asp Asn Ile Thr Val Phe Gly Glu Ser Ala Gly Ala Ala Ser Thr
258          210         215         220
260 His Tyr Met Met Leu Thr Glu Gln Thr Arg Gly Leu Phe His Arg Gly
261      225         230         235         240
263 Ile Leu Met Ser Gly Asn Ala Ile Cys Pro Leu Ala Asn Thr Gln Cys

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264	245	250	255	
266	Gln His Arg Ala Phe Thr Leu Ala Lys Leu Ala Gly Tyr Lys Gly Glu			
267	260	265	270	
269	Asp Asn Asp Lys Asp Val Leu Glu Phe Leu Met Lys Ala Lys Pro Gln			
270	275	280	285	
272	Asp Leu Ile Lys Leu Glu Glu Lys Val Leu Thr Leu Glu Glu Arg Thr			
273	290	295	300	
275	Asn Lys Val Met Phe Pro Phe Gly Pro Thr Val Glu Pro Tyr Gln Thr			
276	305	310	315	320
278	Ala Asp Cys Val Leu Pro Lys His Pro Arg Glu Met Val Lys Thr Ala			
279	325	330	335	
281	Trp Gly Asn Ser Ile Pro Thr Met Met Gly Asn Thr Ser Tyr Glu Gly			
282	340	345	350	
284	Leu Phe Phe Thr Ser Ile Leu Lys Gln Met Pro Met Leu Val Lys Glu			
285	355	360	365	
287	Leu Glu Thr Cys Val Asn Phe Val Pro Ser Glu Leu Ala Asp Ala Glu			
288	370	375	380	
290	Arg Thr Ala Pro Glu Thr Leu Glu Met Gly Ala Lys Ile Lys Lys Ala			
291	385	390	395	400
293	His Val Thr Gly Glu Thr Pro Thr Ala Asp Asn Phe Met Asp Leu Cys			
294	405	410	415	
296	Ser His Ile Tyr Phe Trp Phe Pro Met His Arg Leu Leu Gln Leu Arg			
297	420	425	430	
299	Phe Asn His Thr Ser Gly Thr Pro Val Tyr Leu Tyr Arg Phe Asp Phe			
300	435	440	445	
302	Asp Ser Glu Asp Leu Ile Asn Pro Tyr Arg Ile Met Arg Ser Gly Arg			
303	450	455	460	
305	Gly Val Lys Gly Val Ser His Ala Asp Glu Leu Thr Tyr Phe Phe Trp			
306	465	470	475	480
308	Asn Gln Leu Ala Lys Arg Met Pro Lys Glu Ser Arg Glu Tyr Lys Thr			
309	485	490	495	
311	Ile Glu Arg Met Thr Gly Ile Trp Ile Gln Phe Ala Thr Thr Gly Asn			
312	500	505	510	
314	Pro Tyr Ser Asn Glu Ile Glu Gly Met Glu Asn Val Ser Trp Asp Pro			
315	515	520	525	
317	Ile Lys Lys Ser Asp Glu Val Tyr Lys Cys Leu Asn Ile Ser Asp Glu			
318	530	535	540	
320	Leu Lys Met Ile Asp Val Pro Glu Met Asp Lys Ile Lys Gln Trp Glu			
321	545	550	555	560
323	Ser Met Phe Glu Lys His Arg Asp Leu Phe			
324	565	570		
327	<210> SEQ ID NO: 5			
328	<211> LENGTH: 1713			
329	<212> TYPE: DNA			
330	<213> ORGANISM: Lucilia cuprina			
332	<400> SEQUENCE: 5			
333	atgaatttca acgttagttt gatggagaaa ttaaaaatgga agattaaatg cattgaaaat 60			
334	aagttttaa actatcgttt aactaccaa taaacggtgg tagctgaaac tgaatatggc 120			
335	aaagtgaaag gcgttaaacg tttaactgtg tacgatgatt cctactacag ttttgagggt 180			

VERIFICATION SUMMARY

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Input Set : N:\Crf3\RULE60\09776910.txt
Output Set: N:\CRF3\12172001\I776910.raw

L:1145 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30

L:1182 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31